

ABSTRACT

A circuit and method for controlling an array of n electrostatic actuators, where n is an integer, preferably of at least 32 and may be in excess of 10,000 or more. At least one high voltage generator is provided having a desired high voltage output. N switches are operably connected to the generator, each switch being directly connected to one of the n electrostatic actuators. N capacitors, one of which is connected in parallel to each of the n actuators receives voltage from the high voltage generator through its specific switch. A central processor controls the desired voltage in a particular wave form and the time each of the n switches is closed. The shape of the voltage and the time of the voltage rise is determined by the voltage leakage in the components of the array.